

Supplementary Materials for

Machine Learning-Based WGCNA Approach for Developing an

Immunogenic Cell Death-Related Hub Gene Signature and

Identification of AJM1 as a Prognostic Biomarker in Pancreatic

Adenocarcinoma

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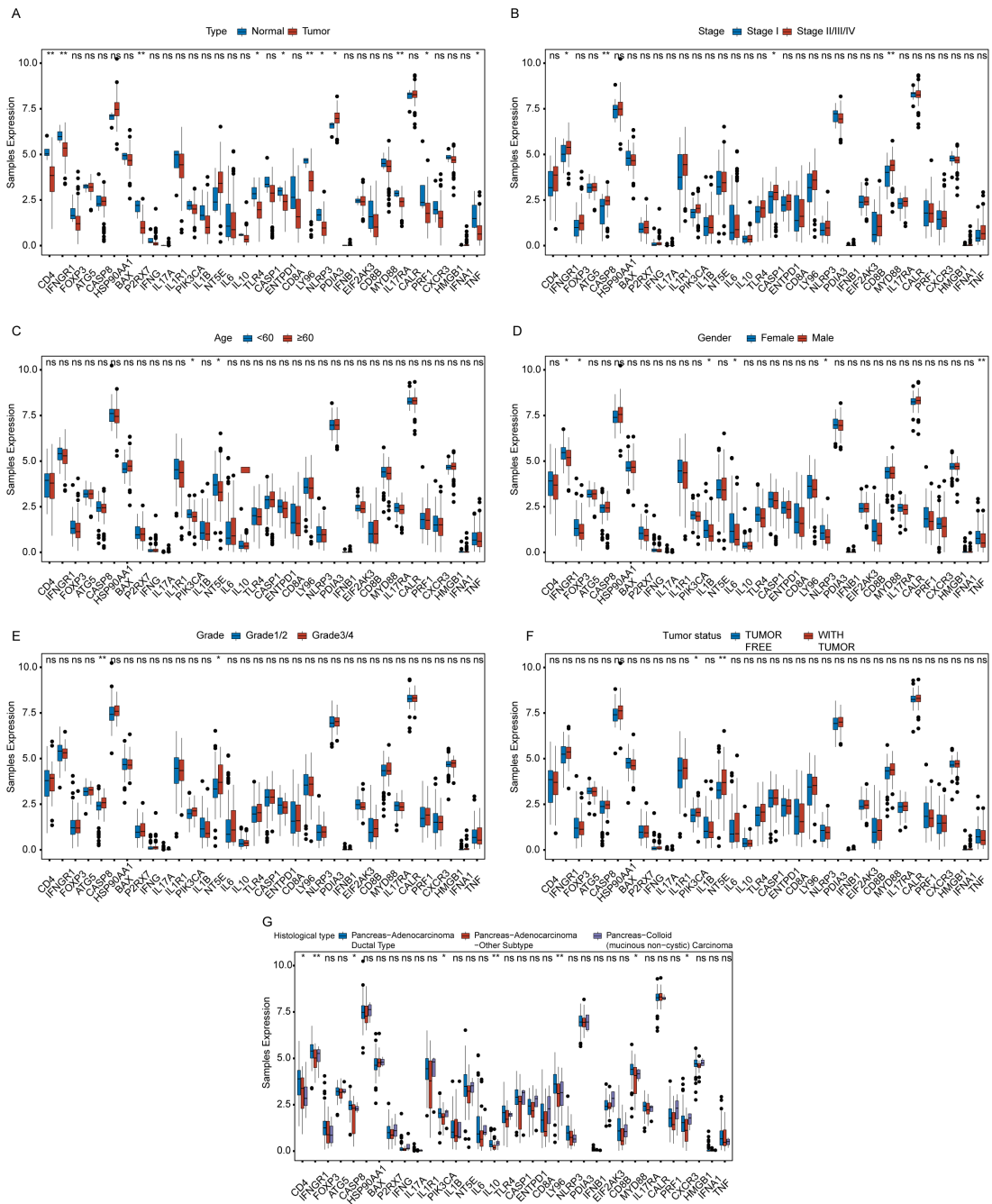


Fig. S1. ICD gene expression profiles in different groups

(A) Differential ICD gene expression in the normal and tumor sample groups. **(B-G)**

Differential expression of ICD genes as a function of stage (B), age (C), gender (D), grade (E), tumor status (F), and histological type (G). n.s., not significant, $*p \leq 0.05$,

$**p \leq 0.01$, $***p \leq 0.001$ and $****p \leq 0.0001$.

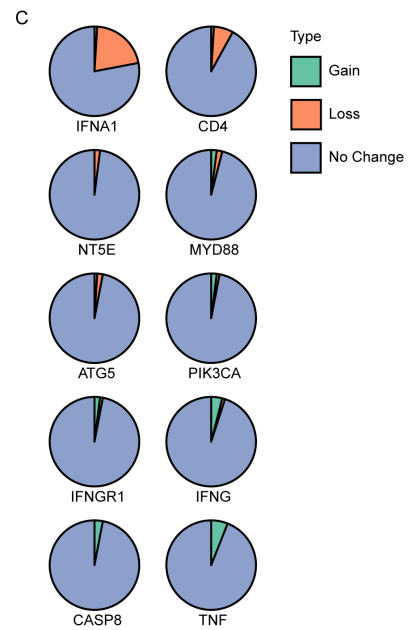
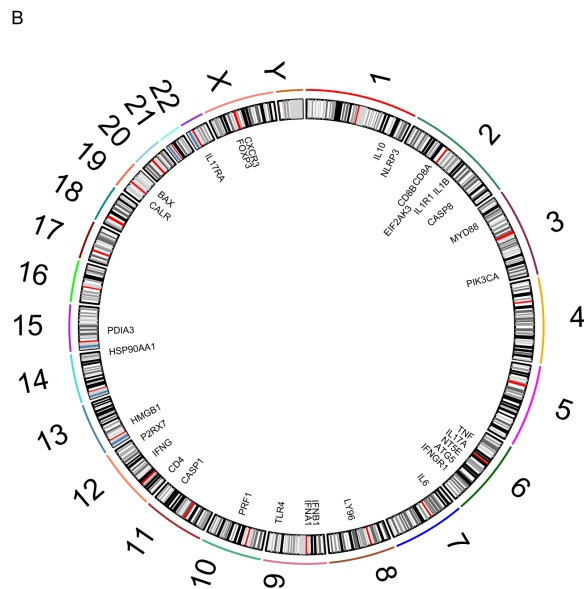
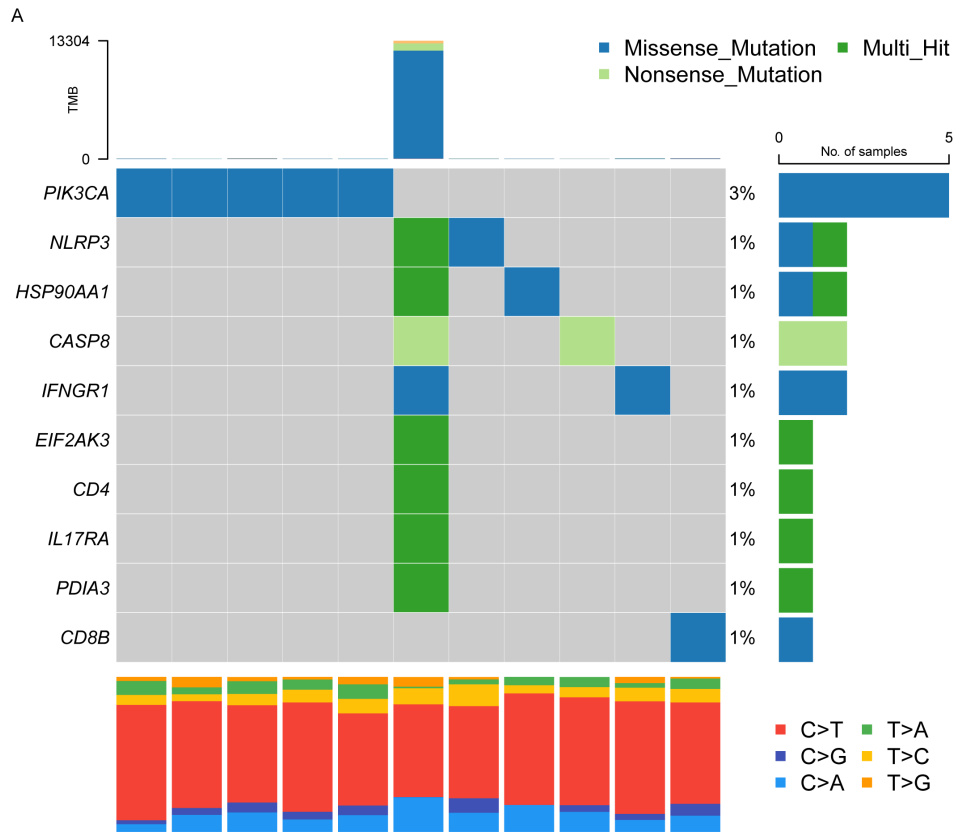


Fig. S2. ICD gene mutations

(A) SNVs of ICD genes, **(B)** Circos plot, **(C)** CNVs map

Table S1. Clinical information table for the TCGA training set.

Characteristics	N	%
Age		
< 60	54	31
≥ 60	122	69
Gender		
Female	80	45
Male	97	55
Stage		
Stage I/II	166	96
Stage III/IV	7	4
Grade		
G1	30	17
G2	94	54
G3/G4	50	29
Race		
ASIAN	11	6.4
BLACK OR AFRICAN AMERICAN	6	3.5
WHITE	155	90.1
Histological type		
Pancreas-Adenocarcinoma Ductal Type	146	83.4
Pancreas-Adenocarcinoma-Other Subtype	25	14.3
Pancreas-Colloid (mucinous non-cystic) Carcinoma	4	2.3

Table S2. Clinical information table for the GSE57495 validation set.

Characteristics	N	%
OS. Status		
Deceased	42	67
Alive	21	33
Stage		
Stage I/II	63	100
Histological type		
Tumor	63	100

Table S3. List of ICD genes.

No.	Gene
1	<i>CD4</i>
2	<i>IFNGR1</i>
3	<i>FOXP3</i>
4	<i>ATG5</i>
5	<i>CASP8</i>
6	<i>HSP90AA1</i>
7	<i>BAX</i>
8	<i>P2RX7</i>
9	<i>IFNG</i>
10	<i>IL17A</i>
11	<i>IL1R1</i>
12	<i>PIK3CA</i>
13	<i>IL1B</i>
14	<i>NT5E</i>
15	<i>IL6</i>
16	<i>IL10</i>
17	<i>TLR4</i>
18	<i>CASP1</i>
19	<i>ENTPD1</i>
20	<i>CD8A</i>
21	<i>LY96</i>
22	<i>NLRP3</i>
23	<i>PDIA3</i>
24	<i>IFNB1</i>
25	<i>EIF2AK3</i>
26	<i>CD8B</i>
27	<i>MYD88</i>
28	<i>IL17RA</i>
29	<i>CALR</i>
30	<i>PRF1</i>
31	<i>CXCR3</i>
32	<i>HMGB1</i>
33	<i>IFNA1</i>
34	<i>TNF</i>

Table S4. Clinical data for the enrolled patients.

Characteristics	N	%
Age		
≤ 60	17	51.5
≥ 60	16	48.5
Sex		
Female	12	36.4
Male	21	63.6
Smoking		
Never	24	72.7
Ever	9	27.3
Drinking		
Never	31	93.9
Ever	2	6.1
Histologic differentiation		
Low	10	30.3
Moderate and high	23	69.7
Tumor stage		
T1+T2	25	75.8
T3+T4	8	24.2
Nodal stage		
N0	5	15.2
N1-2	28	84.8
Metastatic stage		
MX/M0	32	97.0
M1	1	3.0

Table S5. All primer and siRNA sequences.

Name	Sequence (5'-3')
AJM1-F	CAGCGACTCATACTGTGCGGAT
AJM1-R	GCTCCTCTGTATAGAAGAACTGG
GAPDH-F	ACCACAGTCCATGCCATCAC
GAPDH-R	TCCACCACCCTGTTGCTGTA
siNC-F	UUCUCCGAACGUGUCACGU
siNC-R	ACGUGACACGUUCGGAGAA
siAJM1#1-F	CCGUGUACCAGGACAUCAA
siAJM1#1-R	UUGAUGUCCUGGUACACGG
siAJM1#2-F	GCACCGAGACCAUGUUCAA
siAJM1#2-R	UUGAACAUGGUCUCGGUGC

Table S6. List of 26 genes.

No.	Gene
1	<i>ADA2</i>
2	<i>FYN</i>
3	<i>ARRB2</i>
4	<i>EBI3</i>
5	<i>S1PR2</i>
6	<i>RAB8B</i>
7	<i>P2RY8</i>
8	<i>NOTCH2</i>
9	<i>CELF2</i>
10	<i>PLA2G2D</i>
11	<i>CLEC9A</i>
12	<i>GIMAP7</i>
13	<i>LIMS1</i>
14	<i>GRAP2</i>
15	<i>AJMI</i>
16	<i>JAM2</i>
17	<i>IL10RA</i>
18	<i>NLRC3</i>
19	<i>MSN</i>
20	<i>C1QB</i>
21	<i>NRROS</i>
22	<i>WDFY4</i>
23	<i>CHST11</i>
24	<i>SH2B3</i>
25	<i>CD1D</i>
26	<i>ANKRD44</i>